WHAT IS CLAIMED IS:

1. A method of detecting an obstacle, comprising the steps:

a) emitting electromagnetic radiation in the form of a radiation beam with an emitting power into an environment to be monitored including an obstacle, during a measuring cycle having a prescribed time duration;

b) receiving as a reflected signal a portion of said radiation beam that is reflected from said environment including said obstacle;

c) evaluating said reflected signal to determine a presence of and a distance to said obstacle; and

d) varying, in a situation-dependent manner, said emitting power during said prescribed time duration of said measuring cycle.

2. The method according to claim 1, wherein said varying of said emitting power comprises beginning said emitting in said measuring cycle at a prescribed starting value of said emitting power and automatically varying said emitting power thereafter according to a prescribed power variation function in said measuring cycle.

3. The method according to claim 2, further comprising comparing said reflected signal to a prescribed nominal threshold value, and wherein said varying of said emitting power comprises reducing said emitting power from said

prescribed starting value according to said prescribed power variation function during said measuring cycle so long until said reflected signal reaches or falls below said prescribed nominal threshold value.

4. The method according to claim 2, further comprising comparing said reflected signal to a prescribed nominal threshold value, and wherein said varying of said emitting power comprises increasing said emitting power from said prescribed starting value according to said prescribed power variation function during said measuring cycle so long until said reflected signal reaches or exceeds said prescribed nominal threshold value.

5. The method according to claim 4, wherein said prescribed starting value is a zero power value.

6. The method according to claim 1, carried out with an obstacle warning system in a motor vehicle, wherein said varying of said emitting power comprises beginning said emitting at a prescribed starting value of said emitting power, further comprising comparing said reflected signal to a prescribed nominal threshold value, ceasing or changing said varying of said emitting power when said reflected signal reaches or passes said threshold value, and specifying said starting value and said threshold value dependent on operating conditions of said motor vehicle.

7. The method according to claim 6, wherein said operating conditions include a driving speed of said motor vehicle, and said specifying comprises increasing said starting value and said threshold value so as to increase an effective detection range of said radiation beam when said driving speed exceeds a prescribed speed threshold.

8. The method according to claim 6, wherein said operating conditions include a sunshine intensity illuminating said environment, and said specifying comprises increasing said starting value and said threshold value when said sunshine intensity exceeds a prescribed sunshine intensity threshold.

9. The method according to claim 1, wherein said emitting of said electromagnetic radiation comprises emitting successive light pulses of modulated light waves making up said radiation beam during said measuring cycle.

10. A method of detecting an obstacle, comprising the steps:

a) emitting electromagnetic radiation in the form of a radiation beam with an emitting power into an environment to be monitored including an obstacle, during a measuring cycle having a prescribed time duration;

b) receiving as a reflected signal a portion of said radiation beam that is reflected from said environment including said obstacle;

c) comparing a received power level of said reflected signal to a prescribed nominal threshold value; and

d) during said measuring cycle, controlling said emitting power according to a previously prescribed power variation protocol, including beginning said emitting with a prescribed starting value of said emitting power at a start of said measuring cycle, controlling said emitting power according to a first power function from said start of said measuring cycle until a reception time when said reflected signal is first received, and then controlling said emitting power according to a second power function beginning at said reception time, wherein said second power function is dependent on a result of said comparing in said step c) whereby said second power function involves increasing said emitting power if said received power level is initially below said prescribed nominal threshold value and involves reducing said emitting power if said received power level is initially above said prescribed nominal threshold value.

11. The method according to claim 10, wherein said first power function is previously prescribed to involve increasing said emitting power beginning from said starting value.

12. The method according to claim 10, wherein said first power function is previously prescribed to involve decreasing said emitting power beginning from said starting value.

13. The method according to claim 10, wherein said first power function is previously prescribed to involve maintaining said emitting power constant at said starting value.

14. The method according to claim 10, wherein said starting value is a zero power level.

15. The method according to claim 10, wherein said starting value is a finite positive power level.

16. The method according to claim 15, wherein said finite positive power level is specified based on information gained in a prior measuring cycle.

17. The method according to claim 10, wherein said increasing or said decreasing of said emitting power according to said second power function continues until the earlier of an end of said prescribed time duration of said measuring cycle or a control time at which said received power level reaches said prescribed nominal threshold value, at which control time a third power function of said power variation protocol commences.

18. The method according to claim 17, wherein said third power function involves maintaining said emitting power constant at a power level prevailing at said control time.

19. The method according to claim 10, further comprising increasing a rate of said increasing or said decreasing of said emitting power according to said second power function if said received power level has not reached said prescribed nominal threshold value after a specified time interval has elapsed since said reception time.

20. The method according to claim 10, further comprising a preliminary passive mode operation before said step a), comprising passively receiving and evaluating an image signal from a reflection of external illumination of said environment, and commencing said step a) when said evaluating of said image signal determines that the presence and approaching of said obstacle in said environment is probable.

21. A method of detecting an obstacle, comprising the steps:

a) emitting electromagnetic radiation in the form of a radiation beam with an emitting power into an environment to be monitored including an obstacle, during a measuring cycle having a prescribed time duration;

b) receiving as a reflected signal a portion of said radiation beam that is reflected from said environment including said obstacle;

c) comparing a received power level of said reflected signal to a prescribed nominal threshold value; and

d) varying said emitting power according to a previously prescribed power variation protocol during said measuring cycle until said step c) determines that said received power level of said reflected signal has reached said prescribed nominal threshold value.

22. The method according to claim 21, further comprising maintaining said emitting power constant during said measuring cycle following and in response to said step c) determining that said received power level of said reflected signal has reached said prescribed nominal threshold value.

23. The method according to claim 21, wherein said power variation protocol involves reducing said emitting power according to a previously defined decreasing power function while said step c) determines that said received power level of said reflected signal is above said prescribed nominal threshold value.

24. The method according to claim 21, wherein said power variation protocol involves increasing said emitting power according to a previously defined increasing power function while said step c) determines that said received power level of said reflected signal is below said prescribed nominal threshold value.